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Reptilia, Sauria, Sphaerodactylidae, *Lepidoblepharis conolepis* Avila-Pires, 2001: distribution extension in northern Ecuador

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Abstract: We document *Lepidoblepharis conolepis* from El Cielito, Carchi province, northern Ecuador. This record, the first record for Carchi province, represents a northward range extension of 90 km from the previously known occurences. All known occurrences of *L. conolepis*, including our new record, are restricted to the western slopes of the Ecuadorian Andes at sites within fragmented natural forest habitats.

Key words: Tandapi Gecko; Carchi; western Andean slopes; range extension

Ecuador is home to six species geckos belonging to the genus *Lepidoblepharis*, with five species distributed in the northwest and one on the eastern slopes of the country (Avila-Pires 2001; Torres-Carvajal et al. 2015; Uetz and Hošek 2015). *Lepidoblepharis conolepis* Avila-Pires, 2001 is a moderately large *Lepidoblepharis* species that is endemic to Ecuador. This species is only known from a few localities on the western slopes of Cotopaxi and Pichincha provinces (Avila-Pires 2001; Yánez-Muñoz et al. 2009; Aguirre-Peñafiel et al. 2014; Torres-Carvajal and Lobos 2014; Torres-Carvajal et al. 2015). We report a range extension for *L. conolepis* to the province of Carchi in northern Ecuador.

In March 2013, during a field expedition to the northwestern slopes of the Andes in Carchi province, we collected one specimen of *L. conolepis* in the parish of Jacinto Jijón y Caamaño, at La Florida, El Cielito (00°52′13.20″ N, 078°22′13.84″ W; elevation 1591 m; geographic datum WGS84) (Figure 1). The specimen was found during the day, under leaves on the ground in a forest remnant in a good state of preservation. Ministerio del Ambiente granted the collection permit (No. 005-12-IC-FAU-DNB/MA). The collected specimen was deposited at the División de Reptiles of the Museo de Zoología-Pontificia Universidad Católica del Ecuador (QCAZR 14037 [♂], Quito, Ecuador).

Lepidoblepharis conolepis is characterized by having a maximum snout to vent length (SVL) of 44 mm; mental V-shaped with no or one small cleft, with 5–7 small postmentals; dorsal and lateral body scales relatively high, conical or flat-conical, homogeneous in size; 14–17 lamellae under the fourth toe; general coloration dark brown with a few light spots, with a yellowish cream mark on the head (Avila-Pires 2001; Yánez-Muñoz et al. 2009). The specimen QCAZR 14037 (Figure 2) complies

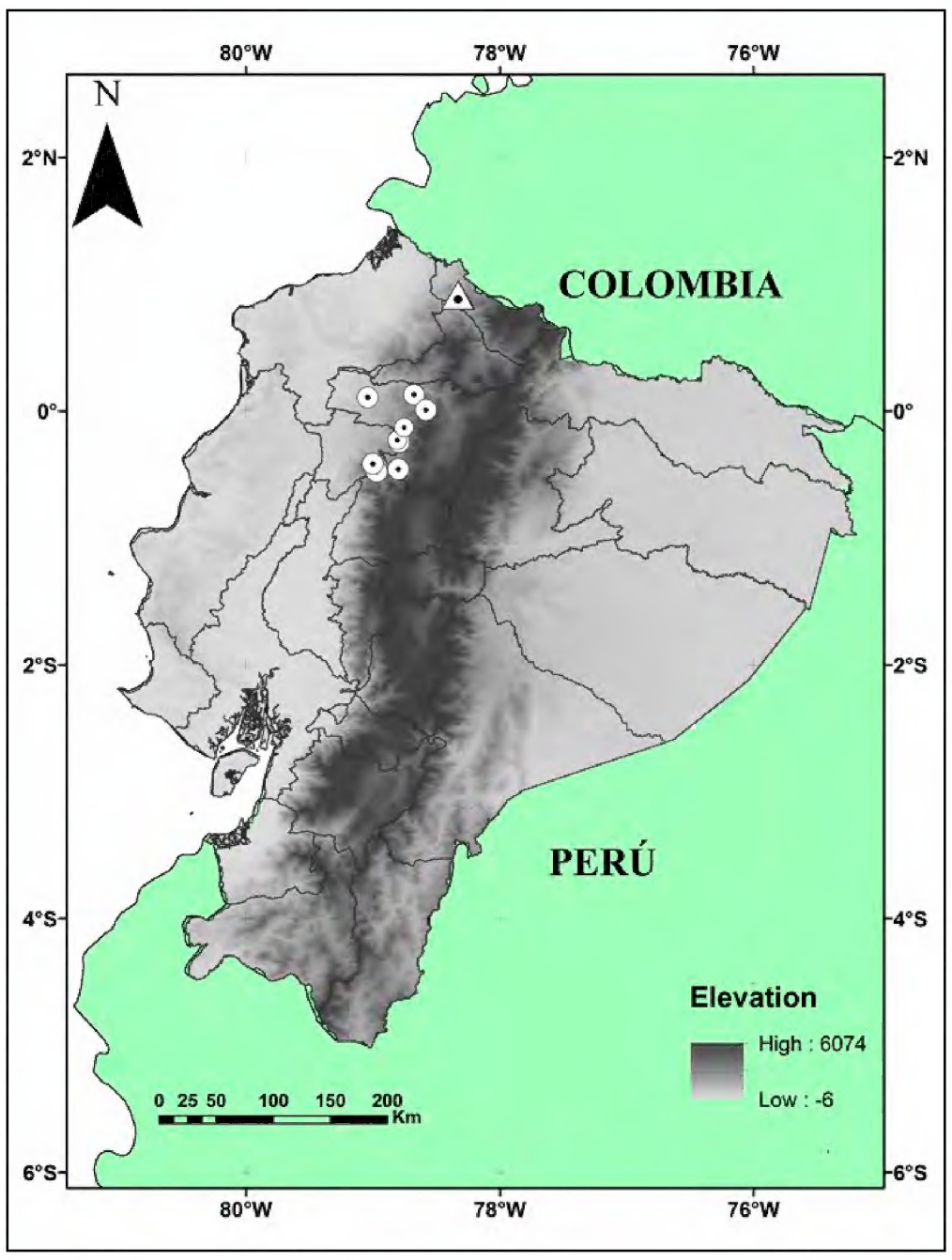

Figure 1. Geographic distribution of *Lepidoblepharis conolepis*. The circles represent the localities known before; the triangle is the new record of distribution extension for the species presented in this paper.

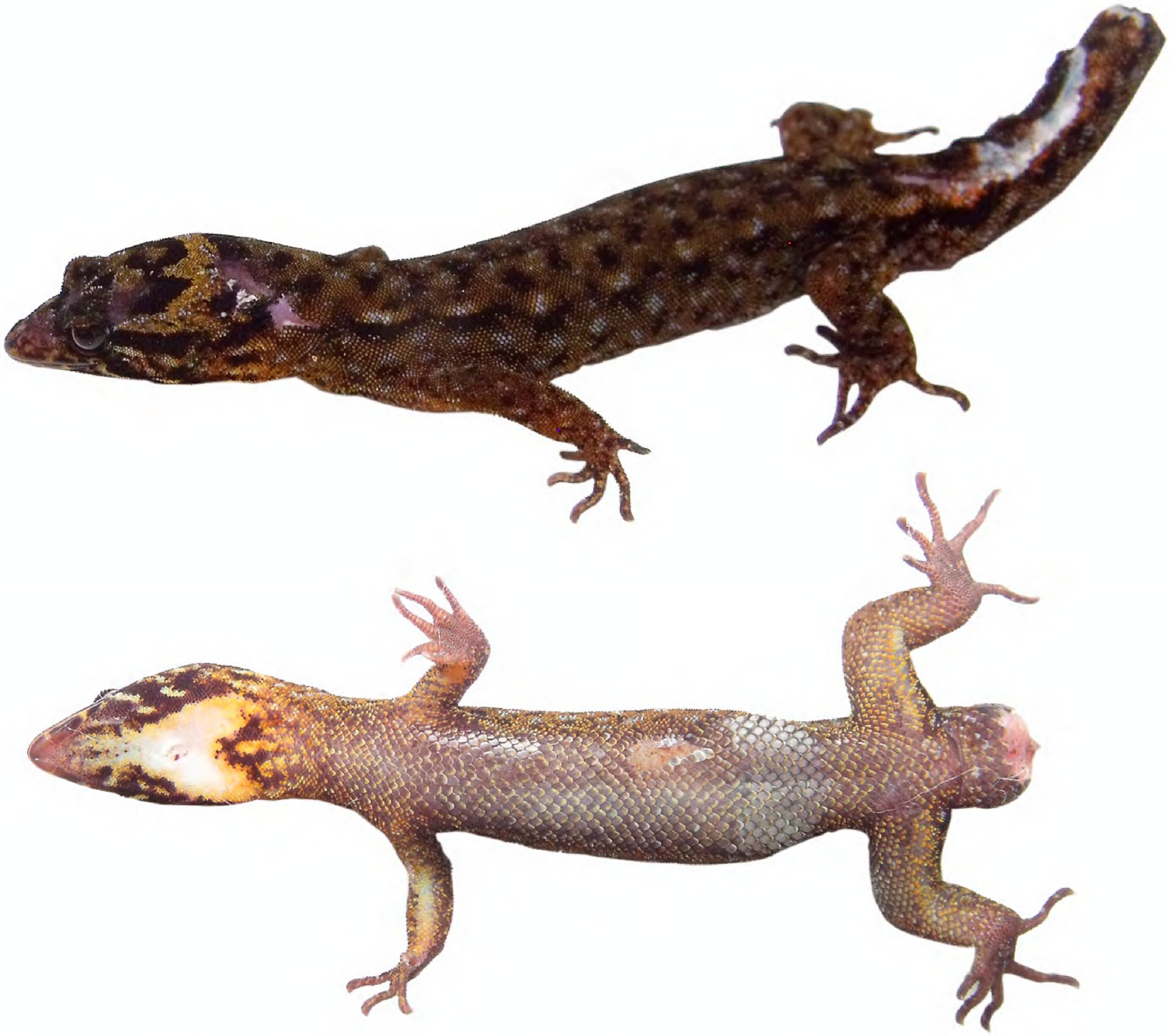

Figure 2. Dorsal and ventral view of *Lepidoblepharis conolepis* (QCAZR 14037). Photos: Carolina Reyes-Puig.

well with these characteristics and it was indentified in the División de Herpetología of the Museo Ecuatoriano de Ciencias Naturales (DHMECN), with the help of the original description of the species (Avila-Pires 2001) and multiple comparisons with other material of *Lepidoblepharis* in the DHMECN. We determined the sex by a subcaudal incision. Finally, Omar Torres-Carvajal, the curator of the División de Reptiles of the QCAZ, confirmed the specimen identification.

The specimen shows a dorsal pattern of dark olive with irregular dark brown marks and light spots (Figure 2), in contrast to the previous records that report a uniform dark brown dorsum with light or turquoise spots (Avila-Pires 2001; Yánez-Muñoz et al. 2009; Torres-Carvajal et al. 2015). *Lepidoblepharis conolepis* was known to occur only at six localities in Pichincha province and two localities in Cotopaxi province (Table 1; Avila-Pires 2001; Yánez-Muñoz et al. 2009; Aguirre-Peñafiel et al. 2014; Torres-Carvajal and Lobos 2014; Torres-Carvajal et al. 2015). Because of this restricted distribution, the species is recognized as Endangered (EN) under criteria B1ab(i,iii,iv) (Carrillo et al. 2005; IUCN 2012); the minimum convex polygon (MCP) encompassing all previous sites is 1,732 km^2. The current record expands the distribution of *L. conolepis* into Carchi province, about 90 km northward from the previously known distribution (Figure 1), and expands the MCP to 2,698 km^2. Although the distribution of the species is increased by our new record, the IUCN criteria and category remains the same. Most known localities of *L. conolepis* are near settled and fragmented areas (MAE 2013). We consider necessary to maximize field sampling to find populations between Pichincha and Carchi provinces.

Table 1. Known localities of *Lepidoblepharis conolepis* in Ecuador. The record presented in this paper is marked with an asterisk (*).

Voucher number	Locality	Coordinates	Elevation (m)
MHNG 2240.5	Pichincha, Mejía, Tandapi	00°27′47.14″S, 078°49′04.88″W	2000
MHNG 2240.23–24; ZFMK 46378–80	Cotopaxi, Sigchos, San Francisco de Las Pampas	00°28′38.82″S, 078°58′14.59″W	1200–1500
QCAZR 2243	Pichincha, Near Chiriboga, Palmeras	00°14′38.40″S, 078°47′38.40″W	1900
QCAZR 8436	Cotopaxi, Naranjito Bosque Integral Otonga	00°24′53.22″S, 079°00′02.64″W	1850
QCAZR 8866	Pichincha, Near Chiriboga, La Soledad Estación Científica Río Guajalito	00°13′44.40″S, 078°48′21.60″W	1836
QCAZR 14037*	Carchi, Mira, La Florida, El Cielito	00°52′13.20″N, 078°22′13.84″W	1591
DHMECN 1349	Pichincha, Quito, Nanegal, Curipogio	00°07′52.01″N, 078°40′34.76″W	1170
DHMECN 7466	Pichincha, Quito, Lloa, Río Cinto	00°07′44.06″S, 078°45′15.74″W	1500
DHMECN 8819	Pichincha, Quito, Calacalí, El Golán	00°00′35.31″N, 078°34′55.34″W	2300

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